



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/590,937	06/26/2007	Paul Tidwell	3772-37	2732
23117 7590 05/14/2009 NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203				
EXAMINER MOHEBBI, KOUROUSH				
ART UNIT		PAPER NUMBER		
2416				
MAIL DATE		DELIVERY MODE		
05/14/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/590,937

**Applicant(s)**

TIDWELL, PAUL

**Examiner**

KOUROUSH MOHEBBI

**Art Unit**

2416

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) 1-7 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 8-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08/28/2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/ICE)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_
- Paper No(s)/Mail Date 08/28/2006, 11/17/2006

### **DETAILED ACTION**

1. This action is response to application number 10590937 dated on 06/26/2007.

Claims 1-7 are cancelled. Claims 8-13 are rejected.

#### ***Claim Rejections - 35 USC § 112***

1. Claim 9 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 9 claims of monitoring the rate of packet loss of the link comprise sampling, sampling is a broad term, spec does not describes the limitation of the "sampling" and as being indefinite.

#### ***Claim Rejections - 35 USC § 101***

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim(s) 8-12 are rejected under 35 U.S.C. 101 as not falling within one of the four statutory categories of invention. While the claims recite a series of steps or acts to be performed, a statutory "process" under 35 U.S.C. 101 must (1) be tied to particular machine, or (2) transform underlying subject matter (such as an article or material) to a different state or thing. See page 10 of In Re Bilski 88 USPQ2d 1385. The instant claims are neither positively tied to a particular machine that accomplishes the claimed method steps nor transform underlying subject matter, and therefore do not qualify as a

statutory process. The method is broad enough that the claim could be completely performed mentally, verbally or without a machine nor is any transformation apparent.

### **Claim Rejections - 35 USC § 102**

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 8-13 are rejected under 35 U.S.C. 102(e) as being anticipated by Vimpari Markku (US. 2003/0117972).

Claim 8, Vimpari discloses a method (abstract, page 1) of optimizing the bandwidth usage (§0015) on a real Time Protocol (RTP) managed link transporting media (communication connection) from a Media Resource Function (Fig. 1, el. 14, converter) of a cellular telecommunications network (Fig. 1, el. 11) to User Equipment (Fig. 1, el. 12b, terminal), the method comprising:

monitoring (§0011) the rate of packet loss (frame or packet loss; §0035) of the link to determine (§0036) whether the rate of packet loss is unacceptably high

or within acceptable limits (measuring quality parameters of communication connection; ¶0011); and

as a result of said monitoring (¶0011), adapting the sending rate over the link (communication connection, Fig. 1, els. 13a and 13b) by re-packetising media (increase or decrease the number of data blocks in a single RTP packet; Fig. 2, el 24; ¶0038), received at the Media Resource Function (converter, Fig. 1, el. 14) from third party nodes (Fig. 1, el. 12a), to either increase the size of packets sent over the link when the rate of packet loss is unacceptably high (Vimpari chooses to decreasing size of transmission packet in case of excessive transmission packet loss; ¶0038), thereby reducing packet header overhead and reducing bandwidth usage on the link (Vimpari selection of smaller size in configuration of the packet in case of higher packet loss is base on fact that losing bigger size packet and retransmission of those packet would lead to less effective usage of bandwidth; ¶0008); or to decrease the size of packets sent over the link when the rate of packet loss is within acceptable limits (Fig. 2, el. 22, ¶0038), thereby reducing the transmission delay over the link (Vampari selection of decreasing size of packet when frame loss rate exceeds a threshold, and increasing the packet size when frame loss rate is within acceptable limits (threshold) is a matter of selecting an option among available configuration options for the transmission link. Selecting different options of a configuration option does not constitute a new invention; ¶0017; ¶0038; Fig. 2).

Claim 9, Vimpari further discloses wherein the step of monitoring (measuring) the rate of packet loss (frame or RTP packet loss) of the link (communication connection, Fig. 1, els. 13a and 13b) comprises sampling (§0035; Fig. 2, e. 22).

Claim 10, Vimpari further discloses wherein said step of adapting the sending rate is carried out dynamically in response to the monitored rate of packet loss (Fig. 2; Vimpari describes after sending the repacketised RTP packet, the device is ready to receive or send the next RTP packet using the RTP packet length adaptor according the step 24; §0039).

Claim 11, Vimpari further discloses wherein, in the event that media is to be repacketised (§0017) at the Media Resource Function (Fig. 1, el. 14, converter), received media is stored at the Media Resource Function (Fig. 1, el. 14, converter) in a buffer until such time as sufficient media has been received to construct a packet of the necessary size (in §0042, Vimpari describes control unit of converter (Media Resource Function) that disassembles the RTP packets into basic packets if long RTP packet received or combine several basic packets into one RTP Packet for transmission if the frame error rate measurement is in acceptable range (less than threshold). The converter as described must buffer the basic packets after disassembling or before combining them to a larger size RTP packet for transmission when frame error rate allows; §0042).

Claim 12, Vimpari further discloses wherein said third party nodes are peer User Equipment (UEs) (Fig. 1, el. 12a; ¶0017).

Claim 13, Vimpari discloses a Media Resource Function node (Fig. 1, el. 14, converter; ¶0027) for use in a cellular telecommunications network (Fig. 1, el. 11), the node handling media sent between itself and user equipment (Fig. 1, el. 12b, terminal), over a Real-Time Protocol managed (RTP) link (communication connection, Fig. 1, els. 13a and 13b), the node comprising:

means for monitoring (¶0011) the rate of packet loss (frame or packet loss; ¶0035) of the downlink to the User Equipment (measuring quality parameters of communication connection 13b and 13a in Fig. 1; ¶0011) to determine (¶0036) whether the rate of packet loss is unacceptably high or within acceptable limits (Fig. 2, el.22; ¶0035; and

means for adapting (¶0017; ¶0027), based upon the monitored properties (¶0035), the sending rate over the link (communication connection, Fig. 1, els. 13a and 13b) by re-packetising media received from third party nodes (Fig. 1, el. 12a), to increase the size of packets sent over said downlink when the rate of packet loss is unacceptably high (Vimpari chooses to decreasing size of transmission packet in case of excessive transmission packet loss; ¶0038), thereby reducing packet header overhead and reducing bandwidth usage on the link (Vimpari selection of smaller size in configuration of the packet in case of

higher packet loss is based on fact that losing bigger size packet and retransmission of those packet would lead to less effective usage of bandwidth; ¶0008); or to decrease the size of packets sent over the link when the rate of packet loss is within acceptable limits (Fig. 2, el. 22, ¶0038), thereby reducing the transmission delay over the link (Vampari selection of decreasing size of packet when frame loss rate exceeds a threshold, and increasing the packet size when frame loss rate is within acceptable limits (threshold) is a matter of selecting an option among available configuration options for the transmission link. Selecting different options of a configuration option does not constitute a new invention; ¶0017; ¶0038; Fig. 2).

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The reference Phillips et al. (US 5,490,168) US published date 06 Feb 1996, discloses a method and communication system provides automatic optimization by adjusting the encoder of the transmitter to use a long packet length during low error counts and a short packet length during high error count.

The reference Pazhyannur et al. (US 2003/0161326) US filing date 25 Feb 2002, discloses a method and apparatus to monitor bit error rate of the transmission media and change dynamically the size of transmission packets for optimal frame size.

The reference Dzung Dacfoy (EP 1120932 A1) published date 1 Aug 2001 discloses a method in data transmission to use variable packet length base on packet error rate and determines the optimal data length for the transmission.

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KOUROUSH MOHEBBI whose telephone number is (571)270-7908. The examiner can normally be reached on Monday to Thursday, 8:00AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/590,937

Page 9

Art Unit: 2416

K.M.

5/06/2009

/Chi H Pham/

Supervisory Patent Examiner, Art Unit 2416

5/11/09